Application No.: 10/573,941 Filing Date: January 23, 2007

AMENDMENTS TO THE CLAIMS

1.-27. (Canceled)

28. (Currently amended) A method of reducing loss of nitrogen from soil exposed to waste from an animal comprising:

identifying the animal whose waste is applied to said soil:

introducing a treatment substance selected from the group consisting of a urease inhibitor compound and a nitrification inhibitor compound internally to said animal; and

excreting waste from the animal onto the soil, wherein the waste acts as a carrier so that the <u>nitrification inhibitor_treatment_substance</u> affects the conversion of nitrogen containing compounds once the waste is excreted from the animal, thereby reducing loss of nitrogen from the soil as compared to loss of nitrogen from <u>a_soil_exposed_to_waste_treatment_substance_was_not_introduced_.</u>

29. (Canceled)

 (Previously presented) A method as claimed in claim 28 wherein said treatment substance is introduced to the animal over an extended time period.

31.-36. (Canceled)

 (Previously presented) A method as claimed in claim 28 wherein the animal waste is urine

38.-40. (Canceled)

- 41. (Currently amended) A method as claimed in claim 40 <u>28</u> wherein the nitrification inhibitor is 3,4-dimethylpyrazole phosphate (DMPP).
- 42. (Currently amended) A method as claimed in claim 40 28 wherein the nitrification inhibitor is dicyandiamide (DCD).
 - 43. (Canceled)
- 44. (Previously presented) The method as claimed in Claim 28, wherein the treatment substance further comprises a beneficial compound that enhances the soil immobilization of nitrogen containing compounds.
- 45. (Previously presented) A method as claimed in claim 44 wherein the beneficial compound enhances the growth of soil microorganisms.
- 46. (Previously presented) A method as claimed in claim 44 wherein the beneficial compound is a complex carbon source.

Application No.: 10/573,941 Filing Date: January 23, 2007

> (Previously presented) A method as claimed in claim 44 wherein the beneficial compound is a tannin.

- 48. (Previously presented) A method as claimed in claim 28, wherein the treatment substance is eliminated along with the animal waste onto the soil.
- (Previously presented) A method as claimed in claim 28, wherein the treatment substance is administered orally to an animal.
- (Previously presented) A method as claimed in claim 49, wherein the treatment substance is administered by drench.
- (Previously presented) A method as claimed in claim 49, wherein the treatment substance is administered by incorporating into animal feed.
- (Previously presented) A method as claimed in Claim 49, wherein the treatment substance is administered by incorporating into water.
- (Withdrawn) A method as claimed in claim 49 wherein the treatment substance is introduced by a ruminal bolus.
- (Withdrawn) A method as claimed in claim 49 wherein the treatment substance is introduced by a rumen-stable delivery device.
- (Withdrawn) A method as claimed in claim 54 wherein the treatment substance is introduced by an encapsulation system.
- (Withdrawn) A method as claimed in claim 28, wherein the treatment substance is introduced into an animal's bladder.
- (Withdrawn) A method as claimed in claim 56 wherein the treatment substance is introduced by a preformed matrix.
 - 58. (Withdrawn) A method as claimed in claim 57 wherein the matrix is silicone.
- (Withdrawn) A method as claimed in claim 56, wherein the treatment substance is introduced by a carrier that has a lower specific gravity than urine.
- 60. (Withdrawn) A method as claimed in claim 28 wherein the treatment substance is introduced into said animal by a delivery device, wherein said treatment substance is contained within the inner core of the delivery device.
- 61. (Withdrawn) A method as claimed in claim 28 wherein the treatment substance is introduced by administering to said animal a delivery device impregnated with said treatment substance.

Application No.: 10/573,941 Filing Date: January 23, 2007

> (Withdrawn) A method as claimed in claim 28, wherein said treatment substance is delivered by diffusion from a delivery device.

- (Withdrawn) A method as claimed in claim 28, wherein said treatment substance is delivered through dissolution of a delivery device.
- 64. (Withdrawn) A method as claimed in claim 28 wherein the treatment substance is introduced by sustained, slow release of said treatment substance.
- (Withdrawn) A method as claimed in claim 28 wherein the treatment substance is introduced by a delivery device that includes an electrochemical cell.
- (Withdrawn) The method as claimed in Claim 28, wherein the treatment substance is introduced internally to said animal by a catheter.
- 67. (Withdrawn) A method as claimed in claim 28, wherein the treatment substance is administered within a material selected from the group consisting of lipid-based coatings, wax coatings and polymer matrices.
- 68. (New) A method as claimed in Claim 28, wherein the method reduces the emission of green-house gasses from the animal waste.